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**UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY**

SCHOOL DISTRICT OF THE CHATHAMS, Civil Action No. _____

Plaintiff,

v.

META PLATFORMS, INC., FACEBOOK HOLDINGS, LLC, FACEBOOK OPERATIONS, LLC, META PAYMENTS INC., META PLATFORMS TECHNOLOGIES, LLC, INSTAGRAM, LLC, SICULUS, INC., SNAP INC., TIKTOK INC., BYTEDANCE, INC., ALPHABET INC., XXVI HOLDINGS INC., GOOGLE LLC, and YOUTUBE LLC.

Defendants.

**COMPLAINT AND
DEMAND FOR JURY TRIAL**

Plaintiff School District of the Chathams of Morris County, New Jersey brings this action against the following Defendant Social Media Companies and their affiliates and subsidiaries: Meta Platforms, Inc., formerly known as Facebook, Inc. (“Meta”), doing business as Facebook (“Facebook”) and doing business as Instagram (“Instagram”), YouTube, LLC, Google LLC, and Alphabet Inc. (collectively, “YouTube”), Snap Inc.,

doing business as Snapchat (“Snapchat”), TikTok Inc. and ByteDance Inc. (collectively, “TikTok”).

I. INTRODUCTION

1. Students, both in Plaintiff’s community and around the country, are being victimized and exploited by the Defendant Social Media Companies, who are ruthlessly extracting every dollar possible with callous disregard for the harm to mental health.

2. By virtue of this lawsuit, Plaintiff seeks to hold Defendants responsible for the harm caused by their conduct which preys on their youngest and most vulnerable users.

3. Public schools are on the frontlines of this unfair fight.

4. Indeed, public schools, including Plaintiff, are forced to spend increasing resources as the first responders in an attempt to stave off the rising rates of suicidal ideation, depression, anxiety, and other tragic indices of this public health crisis.

5. The last decade has seen a steady rise in the mental health struggles of our children. As the world has grown interconnected over the same period, the channels through which children connect have solidified into massive data pipelines from which hundreds of billions of dollars of profits have been wrung by the Defendants.

6. Defendants’ businesses exploit minor users’ undeveloped decision-making capacity, impulse control, emotional maturity, and poor psychological resiliency.

7. Defendants also know that minors are much more likely to sustain serious psychological harm through social media use than adults. Nevertheless, Defendants knowingly seek to grow the use of their platforms by minors through designs, algorithms, and policies that promote addiction, compulsive use, and other severe mental harm—and by thwarting the ability of parents to keep their children safe and healthy by supervising and limiting social media use.

8. As a result, the U.S. Surgeon General, Commissioner Bedoya of the Federal Trade Commission, and leading children’s health groups have all sounded the alarm – adolescents and children are suffering a mental health crisis.¹ These authorities all highlight the dramatic increases in the mental health needs of minors. The Surgeon General has linked this to social media’s relentless focus on profits over safety—“[b]usiness models are often built around maximizing user engagement as opposed to safeguarding users’ health and ensuring that users engage with one another in safe and healthy ways.”² Similarly, Commissioner Bedoya of the Federal Trade Commission observed that “we live in an attention economy. . . . In an attention economy, companies very literally compete for our thoughts, our time, our minds. No one should be surprised if that economy affects our mental health.”³ There is no question that children are facing a growing mental health crisis of epidemic proportions. And there is similarly no question that Defendants are a substantial cause of this crisis.

9. This youth mental health crisis is infecting all aspects of education – students experience record rates of anxiety, depression, and other mental health issues because of Defendants’ intentional conduct. And these students perform worse in school, are less likely to attend school, more likely to engage in substance use and to act out, all of

¹ AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health, available at <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.

² Protecting Youth Mental Health, The U.S. Surgeon General’s Advisory, 2021, available at <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.

³ Commissioner Alvaro M. Bedoya, Federal Trade Commission, Prepared Remarks Before the National Academies of Sciences, Engineering & Medicine Meeting of the Committee on the Impact of Social Media on the Health and Wellbeing of Children & Adolescents (February 7, 2023).

which directly affects the Plaintiff's ability to fulfill its educational mission.

10. That is why Plaintiff, as part of its mission, and like almost every school in the country, provides mental health services to their students. Plaintiff trains its teachers and staff to screen students for mental health symptoms and provide, or refer, them to services, such as those offered by the school-based health clinics operated in partnership with behavioral health agencies. Plaintiff continues to hire mental health professionals in an attempt to keep up with the ever-growing need of its students, but there is no end in sight. Plaintiff needs much more.

11. Plaintiff requires funding to develop a long-term plan to deal with the mental health crisis and address the record rates of depression, anxiety, suicidal ideation, and the other tragic byproducts caused by Defendants. And Plaintiff needs Defendants to take accountability for their bad acts. It needs Defendants to stop targeting youths for profit and it needs them to stop programming their algorithms that they know are the driving force behind the current mental health crisis for the students in Plaintiff's school system.

II. JURISDICTION AND VENUE

12. This Court has jurisdiction pursuant to 28 U.S.C. § 1331(a) because the amount in controversy exceeds \$75,000.00, and Plaintiff and Defendants are residents and citizens of different states.

13. The Court has personal jurisdiction over Defendants because they do business in the District of New Jersey and have sufficient minimum contacts with the District. Defendants intentionally avail themselves of the markets in this State through the promotion, marketing, and operations of their platforms at issue in this lawsuit in New Jersey, and by retaining the profits and proceeds from these activities, to render the exercise of jurisdiction by this Court permissible under New Jersey law and the United States

Constitution.

14. Venue in this Court is proper under 28 U.S.C. §§ 1391(b)(2) and (3) because a substantial part of the events or omissions giving rise to the claims at issue in this Complaint arose in this District and Defendants are subject to the Court's personal jurisdiction with respect to this action.

III. PARTIES

A. Plaintiff

15. Plaintiff School District of the Chathams is in Morris County, New Jersey with an enrollment of over three-thousand students.

B. Meta Defendants

16. Defendant Meta Platforms, Inc. ("Meta"), formerly known as Facebook, Inc., is a Delaware corporation with its principal place of business in Menlo Park, California.

17. Defendant Meta develops and maintains social media platforms, communication platforms, and electronic devices that are widely available to users throughout the United States. The platforms developed and maintained by Meta include Facebook (including its self-titled app, Marketplace, and Workplace), Messenger (including Messenger Kids), Instagram, and a line of electronic virtual reality devices and services called Meta Quest (collectively, "Meta platforms").

18. Meta transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with its subsidiaries (identified below), Meta has advertised, marketed, and distributed the Meta platforms to consumers throughout the United States. At all times material to this Complaint, Meta formulated, directed, controlled, had the authority to control, or

participated in the acts and practices set forth in this Complaint.

19. Defendant Meta's subsidiaries include Facebook Holdings, LLC; Facebook Operations, LLC; Meta Payments Inc.; Meta Platforms Technologies, LLC; Instagram, LLC; and Siculus, Inc.

20. Defendant Facebook Holdings, LLC ("Facebook Holdings") was organized under the laws of the state of Delaware on March 11, 2020, and is a wholly owned subsidiary of Meta Platforms, Inc. Facebook Holdings is primarily a holding company for entities involved in Meta's supporting and international endeavors, and its principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Facebook Holdings.

21. Defendant Facebook Operations, LLC ("Facebook Operations") was organized under the laws of the state of Delaware on January 8, 2010, and is a wholly owned subsidiary of Meta Platforms, Inc. The principal place of business of Facebook Operations is in Menlo Park, California. Defendant Meta is the sole member of Facebook Operations.

22. Defendant Meta Payments Inc. ("Meta Payments") was incorporated in Florida on December 10, 2010, as Facebook Payments Inc. In July 2022, the entity's name was amended to Meta Payments Inc. Meta Payments is a wholly owned subsidiary of Meta Platforms, Inc. Meta Payments manages, secures, and processes payments made through Meta, among other activities, and its principal place of business is in Menlo Park, California.

23. Defendant Meta Platforms Technologies, LLC ("Meta Technologies") was organized under the laws of the state of Delaware as "Oculus VR, LLC" on March 21,

2014, and acquired by Meta on March 25, 2014. In November 2018, the entity's name was amended to Facebook Technologies, LLC. In June 2022, the entity's name was amended again, this time to Meta Platforms Technologies, LLC. Meta Technologies develops Meta's virtual and augmented reality technology, such as the Meta Quest line of services, among other technologies related to Meta's platforms, and its principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Meta Technologies.

24. Defendant Instagram, LLC ("Instagram") was founded by Kevin Systrom and Mike Krieger in October 2010. In April 2012, Meta purchased the company for approximately \$1 billion. Meta reformed the limited liability company under the laws of the state of Delaware on April 7, 2012, and the company's principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Instagram.

25. Defendant Siculus, Inc. ("Siculus") was incorporated in Delaware on October 19, 2011. Siculus is a wholly owned subsidiary of Meta, which supports Meta platforms by constructing data facilities and other projects. Siculus's principal place of business is in Menlo Park, California.

C. Snap Defendant

26. Defendant Snap Inc. ("Snap") is a Delaware corporation with its principal place of business in Santa Monica, California. Snap transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with others, Snap has advertised, marketed, and distributed the Snapchat social media platform to consumers throughout the United States. At all times material to this Complaint, Snap formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

D. TikTok Defendants

27. Defendant TikTok Inc. was incorporated in California on April 30, 2015, with its principal place of business in Culver City, California. TikTok Inc. transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with others, TikTok Inc. has advertised, marketed, and distributed the TikTok social media platform to consumers throughout the United States. At all times material to this Complaint, acting alone or in concert with ByteDance Inc., TikTok Inc. formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

28. Defendant ByteDance Inc. (“ByteDance”) is a Delaware corporation with its principal place of business in Mountain View, California. ByteDance transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with others, ByteDance has advertised, marketed, and distributed the TikTok social media platform to consumers throughout the United States. At all times material to this Complaint, acting alone or in concert with TikTok Inc., ByteDance formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

E. YouTube Defendants

29. Defendant Alphabet Inc. is a Delaware corporation with its principal place of business in Mountain View, California. Alphabet Inc. is the sole stockholder of XXVI Holdings Inc.

30. Defendant XXVI Holdings Inc. is a Delaware corporation with its principal place of business in Mountain View, California. XXVI Holdings, Inc. is a wholly owned subsidiary of Alphabet Inc. and the managing member of Google LLC (“Google”).

31. Defendant Google LLC is a limited liability company organized under the laws of the state of Delaware, and its principal place of business is in Mountain View, California. Google LLC is a wholly owned subsidiary of XXVI Holdings Inc., and the managing member of YouTube, LLC. Google LLC transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with others, Google LLC has advertised, marketed, and distributed its YouTube video sharing platform to consumers throughout the United States. At all times material to this Complaint, acting alone or in concert with YouTube, LLC, Google LLC formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

32. Defendant YouTube, LLC is a limited liability company organized under the laws of the state of Delaware, and its principal place of business is in San Bruno, California. YouTube, LLC is a wholly owned subsidiary of Google LLC. YouTube, LLC transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with Defendant Google LLC, YouTube, LLC has advertised, marketed, and distributed its YouTube social media platform to consumers throughout the United States. At all times material to this Complaint, acting alone or in concert with Google LLC, YouTube, LLC formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

IV. FACTUAL BACKGROUND

A. Facebook and Its Manipulative Designs

33. Facebook is an online social network that is part of the Meta Platforms. Facebook was founded in 2004, at which time, Facebook was nothing like it is today. In

fact, when Facebook was first founded, only students at certain colleges and universities could use the social media platform – and verification of college enrollment was required to access the platform.

34. In 2005, Facebook expanded and became accessible to students at twenty-one universities in the United Kingdom and others around the world. Meta launched a high school version of Facebook, which Meta CEO and majority shareholder, Mark Zuckerberg, referred to as the next logical step. Even then, however, high school networks required an invitation to join.

35. Facebook later expanded eligibility to employees of several companies, including Apple Inc. and Microsoft. On December 11, 2005, Facebook added universities in Australia and New Zealand to its network and, in September 2006, Facebook opened itself up to everyone. At the time, Facebook claimed that it was open only to persons aged 13 and older and with a valid email address, *however*, on information and belief, Facebook made the decision to no longer require verification of age and/or identity and did not actually verify user email address, such that underage users could literally enter nonsense email addresses and would be provided by Meta with access to a Facebook account.

36. Meta's history proves that Meta knows how to implement design features meant to restrict access to persons above a certain age or even employed in certain industries and at certain companies. Meta's initial audience was limited to college students and older, but in 2006, Meta made the deliberate, business decision to instead begin distributing its platform to everyone in the world with internet access, regardless of the consequences.

37. This choice to expand the distribution of Meta's platform dovetailed with a conscious effort to maximize user engagement with the Facebook platform by any means

necessary—including conscious design choices that would be harmful to youth mental health. As Sean Parker, Meta’s first President, explained in a 2017 interview:

The thought process that went into building these applications, Facebook being the first of them, to really understand it was all about: “How do we consume as much of your time and conscious attention as possible?” And that means that we need to sort of give you a little dopamine hit every once in a while, because someone liked or commented on a photo or a post or whatever. And that’s going to get you to contribute more content, and that’s going to get you, you know, more likes and comments. It’s a social-validation feedback loop that that it’s exactly the kind of thing that a hacker like myself would come up with, because you’re exploiting a vulnerability in human psychology. The inventors, creators — it’s me, it’s Mark [Zuckerberg], it’s Kevin Systrom on Instagram, it’s all of these people — understood this consciously. And we did it anyway.

38. “God only knows what it’s doing to our children’s brains,” Mr. Parker went on to remark in the same interview.

39. Similarly, in testimony before Congress in September 2020, Tim Kendall, Facebook’s first director of monetization, reaffirmed that Meta had chosen to design its platforms in ways it knew to be dangerous in order to maximize engagement. Mr. Kendall explained:

At Facebook, I believe we sought to mine as much human attention as possible and turn it into historically unprecedented profits. To do this, we didn’t simply create something useful and fun; we took a page from Big Tobacco’s playbook, working to make our offering addictive at the outset....

The next page in Big Tobacco’s playbook was to add bronchodilators to cigarettes. This allowed the smoke to get in contact with more surface area of the lungs. Allowing for misinformation, conspiracy theories, and fake news to flourish were Facebook’s bronchodilators.

But that incendiary content wasn’t enough. Tobacco companies then added ammonia to cigarettes to increase the speed with which nicotine traveled to the brain. Facebook’s ability to deliver this incendiary content to the right person, at the right time, in the exact right way—through their algorithms—that is their ammonia. And we now know it fosters tribalism and division.

Social media preys on the most primal parts of your brain, it provokes, it shocks, and it enrages. . . .

Facebook and their cohorts worship at the altar of engagement and cast other concerns aside, raising the voices of division, anger, hate, and misinformation to drown out the voices of truth, justice, morality, and peace.

40. Mr. Parker and Mr. Kendall's confessions stands in stark contrast with Meta's public statements about the safety of its platforms. Throughout its changes, re-designs, and launches, Facebook founder and CEO, Mark Zuckerberg, made public statements promising the world that safety was Meta's (then Facebook) top priority. For example, in February of 2017, he made a post on his personal Facebook titled "Building Global Community," in which he talked at length about how Meta is focused on safety, how it intends to use its artificial intelligence to the fullest to keep users safe, and how amazing Facebook is for bringing communities together, promoting critically important social groups, and other statements that we now know to be untrue and profoundly dangerous, given what was actually happening at Facebook and what Mr. Zuckerberg knew about the harms his platforms were causing American youth including those in Plaintiff's schools and throughout New Jersey.

41. In 2017, however, Meta employees were already reporting to management that Facebook was causing harmful dependencies. Meta was already marketing to children under 13, despite clear legal mandates that it could not allow children under 13 on its social media product. And Meta leadership, Mr. Zuckerberg himself, actively rejected proposed re-designs intended to minimize the harms to child and teen users, like the youth attending Plaintiff.

42. There are many aspects of Meta's platforms that drive harm to youth mental health. Publicly visible social metrics, such as "Likes" or view counts, turn social

interaction into a competition, in ways that are peculiarly harmful to adolescents. Algorithmic data mining is able to pair users with whatever content will maximize their engagement with Meta's platforms. This includes both engagement that may be at times that are harmful—like deep in the night when children should be sleeping, or during school—and forms of engagement that may be harmful—like identifying a young girl with body image issues and feeding her a constant stream of progressively more disturbing pro-anorexia content, or identifying a child struggling with depression and feeding him a constant stream of pro-suicide content. Countless other aspects of Meta's platforms further youth mental harms.

43. Over the years, Meta employees have offered countless suggestions and recommendations as to design changes Meta could make to better protect its users from the harms Meta causes. And over the years, Meta leadership has declined, delayed, or outright ignored the vast majority of those in favor of its own financial and growth-related interests.

44. Meta also, at the same time CEO Mark Zuckerberg was touting the importance and helpful function of Meta's group recommendations algorithm, was recognizing the massive number of truly harmful and horrific groups on its social media platform – and the fact that its algorithm was directing users, including children and teens, to these harmful groups. That is, these children and teens would never have been exposed to such harmful content but for Meta's systems and its programming of those systems to prioritize engagement over user safety.

45. More recently, Meta has conducted studies relating to social comparison harms. “Social Comparison: Topics, celebrities, Like counts, selfies” and “Appearance-based Social Comparison on Instagram.” These studies have recognized that the toxic stew

of design features Meta purposely embedded in its platforms cause intense mental harms to young people. Yet Meta has systematically implemented these design features—precisely because it has continued to embrace an engagement-focused business model.

46. In other words, the promotion of harmful content has become so central to Defendants' business models (*i.e.* it makes them so much money) that Defendants regularly opt to conceal the truth and continue harming users instead of making their platforms safer and less harmful. Facebook profile and privacy settings also cause harm. Users' profiles on Facebook may be public or private, which is a feature over which Meta exercises complete control. On public profiles, any user can view the photos, videos, and other content posted by the user. On private profiles, the user's content may only be viewed by the user's followers, which the user must approve. For many years, Facebook profiles were public by default and Facebook allowed all users to message and send follow requests to underage users. But even now, when Meta claims that it is defaulting certain categories of users on certain of its social media platforms into private profiles, all a user need do is change the profile setting and, once again, Meta will allow all users to message and send follow requests to underage users. Meta can protect users from this specific harm, can do so immediately, and chooses to not do so as a matter of engagement and growth.

47. Permitting public profiles for underage users serves no critical purpose in terms of functionality but, instead, it increases user engagement during onboarding (when a user first starts using social media) by increasing user connections and generally by providing all users with greater access to other users, in this case, irrespective of their age. Unfortunately for young children and teens, a significant percentage of those would-be connections are harmful. Meta is aware of these harms and has opted not to make necessary

changes to prevent it.

48. Meta's Messenger settings also permit and encourage harm to "vulnerable" users. Harmful and dangerous interactions occur because of the Facebook Messaging application, which is integrated with the Facebook app. Specifically, Meta's chosen settings provide predators and other bad actors with direct and unsupervised access to children and teens. Meta knows that Direct Messages is where most unwanted interactions happen, for example, things like bullying and sexual exploitation of minors. Meta simply does not care enough to change its platform settings, because it knows that changing them would also have a negative impact on engagement and, potentially, ad revenue.

49. Meta's push notifications and emails encourage addictive behavior and are designed specifically to increase use of its social media platforms. In the case of Instagram, Defendant Meta collects individualized data – not just about the user, but also about the user's friends and contacts – and then selects content and notification frequency for its users and notifies them via text and email. Meta's notifications to individual users are specifically designed to, and do, prompt them to open Instagram and view the content Instagram selected, increasing sessions, and resulting in greater profits to Instagram. More to the point, even the format of these notifications has been designed and re-designed with the specific purpose of pulling users back onto the social media platform—irrespective of health or wellbeing.

50. Facebook also incorporates several features that appeal to students, such as "likes" and in-app games, which serve to increase social comparison pressure and resulting harm. The harm from these features does not relate to a single "like" or filter, but rather, it is the deluge of this content that causes unnecessary addictive, compulsive, and excessive

use by students. Meta knows, for example, that “like” and filter features disproportionately harm teen girls and young women.

51. Facebook also creates images and GIFs for users to post on their videos and pictures. Meta has also acquired publishing rights to thousands of hours of music, which it provides to its users to attach to the videos and pictures that they post on Facebook. The GIFs, images, and music are integral to the user’s Facebook post and are, in fact, designed to encourage posting. Indeed, in many cases, the only content in a user’s Facebook post is the image, GIF or music supplied by Meta. When users incorporate images, GIFs, and music supplied by Meta into their postings, Meta functions as a co-publisher of such content. A Facebook user who incorporates images, GIFs or music supplied by Meta into their post is functionally equivalent to a novelist who incorporates illustrations into their story. Meta can no longer characterize the images, GIFs, and music it supplies to its users as third-party content, just as the novelist cannot disclaim responsibility for illustrations contained in their book. Meta has made the deliberate decision to collaborate with its users in this regard and, as evidenced by Meta’s internal documents, Meta’s decision is motivated by the fact that such collaboration results in increased engagement and more profits for Meta itself.

52. Meta directly profits from the time, attention, and data of its young users as well as from the content its users create in collaboration with Meta, as described above.

53. Meta knows that it is harming teens yet, when faced with recommendations that will reduce such harms, Meta’s leadership consistently opts for prioritization of profit over the health and well-being of its teen users.

54. As detailed by the Congressional testimony of a Facebook whistleblower, Frances Haugen, “The company’s leadership knows ways to make Facebook and Instagram

safer and won't make the necessary changes because they have put their immense profits before people."⁴ Haugen continued, "[Facebook's] profit optimizing machine is generating self-harm and self-hate — especially for vulnerable groups, like teenage girls. These problems have been confirmed repeatedly by Facebook's own internal research."⁵ As emphasized by Haugen, "Facebook became a \$1 trillion company by *paying for its profits with our safety, including the safety of our children.*"⁶ Haugen's explosive testimony and documentary evidence have unfortunately not changed this conduct.

55. While Facebook has stated that it has changed its algorithms to avoid targeting teens, research indicates that the newer algorithms may in fact be worse.⁷

56. Millions of teen users, including the students of Plaintiff, use Meta's inherently dangerous and defective social media platform every single day.

B. Instagram and Its Manipulative Designs

57. Instagram's original focus was to facilitate communication through images by featuring photos taken on mobile devices. Instagram launched in October 2010 and Facebook acquired it for \$1 billion in April 2012. Once acquired, Instagram experienced

⁴ Frances Haugen, Statement before United States Senate Committee on Commerce, Science and Transportation, Sub-Committee on Consumer Protection, Product Safety, and Data Security (Oct. 4, 2021), available at <https://www.commerce.senate.gov/services/files/FC8A558E-824E-4914-BEDB-3A7B1190BD49>.

⁵ *Id.*

⁶ *Id.* (emphasis in original).

⁷ Elena Yi-Ching Ho, Rhy Farthing, *How Facebook still targets surveillance ads to teens* (Nov. 2021), available at <https://fairplayforkids.org/wp-content/uploads/2021/11/fbsurveillancereport.pdf>. ("Facebook's ad delivery system continues to harvest teens' data, for the sole purpose of serving them surveillance advertising, with all the associated concerns. Replacing 'targeting selected by advertisers' with 'targeting optimised by AI' does not represent a demonstrable improvement for children in the way that Facebook characterised this in both their initial announcement and Ms Davis' Senate testimony. It is, in all likelihood, worse.").

exponential growth, design, and development changes. It went from 10 million monthly active users in September of 2012 to 50 million weeks after the acquisition, to more than 600 million by December of 2016, and it continues to grow. Meta instituted dozens of changes (also known as “growth hacks”) that drove this increased engagement, but it did so at the expense of the health and well-being of Instagram’s users—especially teens and children.

58. As described above, Instagram, like Facebook, is structured to induce addiction, compulsive use, and over-engagement, in ways that are both inherently harmful, and that lead to predictable and foreseeable further harms.

59. Meta’s platforms also are designed to create dangerous “rabbit hole” experiences for users and to promote harmful content. Meta’s algorithms are programmed to prioritize number of interactions and not quality of interactions. Worded otherwise, Meta promotes and amplifies content based on engagement objectives and not the health and well-being of their users, which renders their social media platforms inherently dangerous and defective, particularly when used by teens and children.

60. Both the Facebook and Instagram platforms push a “feed” to users. The “feed” Meta pushes to a user is comprised of a series of photos and videos. But, importantly, the content of the “feed” does not consist only of material posted by accounts that the user has chosen to follow. It includes substantial volumes of content specifically selected and promoted by Meta, as well as advertising. Meta’s algorithms and designs drive the experience the user has, not the user’s choices.

61. Meta exerts control over a user’s Instagram “feed,” including through certain ranking mechanisms, escalation loops, and/or promotion of advertising and content

specifically selected and promoted by Meta based on, among other things, its ongoing planning, assessment, and prioritization of the types of information most likely to increase engagement. In the case of certain user groups, like teens, this control translates to deliberate and repeated promotion of harmful and unhealthy content, which Meta knows is causing harm to its young users.

62. Instagram also has a search feature called “Explore,” where a user is shown an endless feed of content that is selected by an algorithm designed by Meta based upon the users’ demographics and prior activity in the application. This is not content the user has searched for or requested. Instead, it is content Meta selects via its algorithms (which Meta in turn programs to increase engagement and in other ways Meta knows to be harmful to users, but more profitable to Meta), as well as paid advertisements created with Meta’s assistance or approval, and the like. Indeed, Meta’s internal analyses indicate that the “Explore” feature is amongst the most damaging features for teens:



Instagram, *Teen Girls Body Image and Social Comparison on Instagram—An*

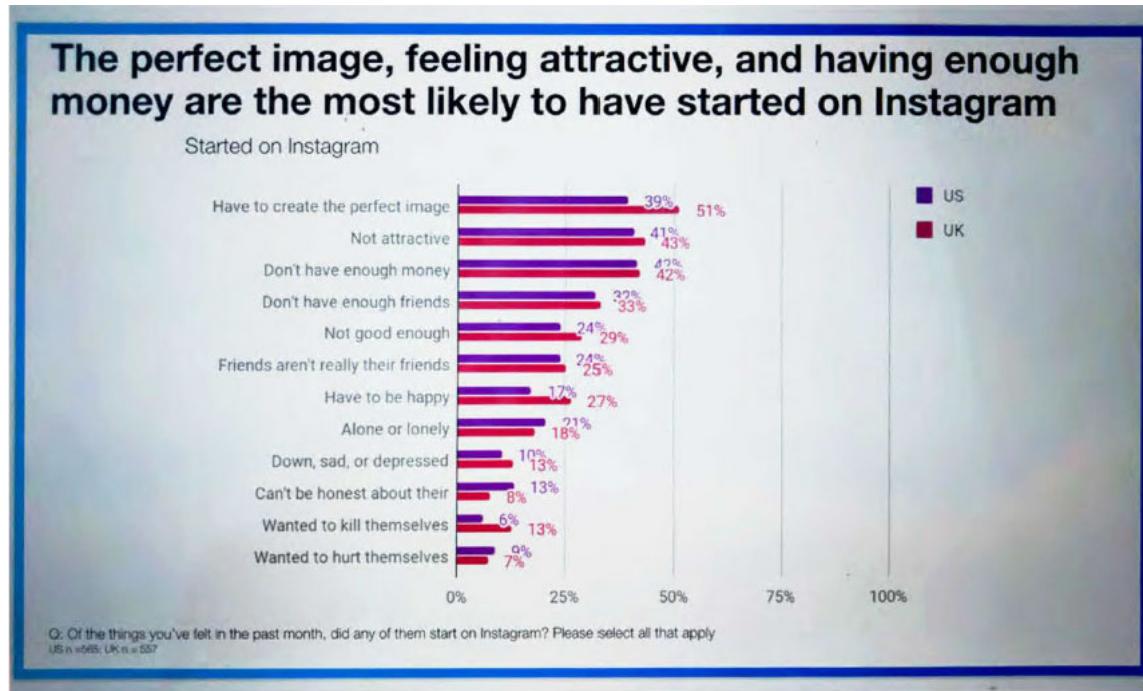
Exploratory Study in the U.S., available at <https://s.wsj.net/public/resources/documents/teen-girls-body-image-and-social-comparison-on-instagram.pdf>, at 31.

63. Meta promotes harmful and/or unhealthy content. Meta is aware of these inherently dangerous product features and has repeatedly decided against changing them and/or implementing readily available and relatively inexpensive safety measures, for the stated purpose of ensuring continued growth, engagement, and revenue increase. Meta's own analysis recognizes simple solutions such as "current time spent" tools could be effective.⁸

64. Leaked reports from Meta confirm its knowledge of its severe impact on teens. For example, the following indicates the results of surveys concerning negative feelings, including depression, suicidal ideation or violence to others, that teens had over the prior month directly attributable to Instagram, as well as a categorization of how Instagram causes harm to teens:⁹

⁸ See, *supra*, *Teen Girls Body Image and Social Comparison on Instagram*, at 40.

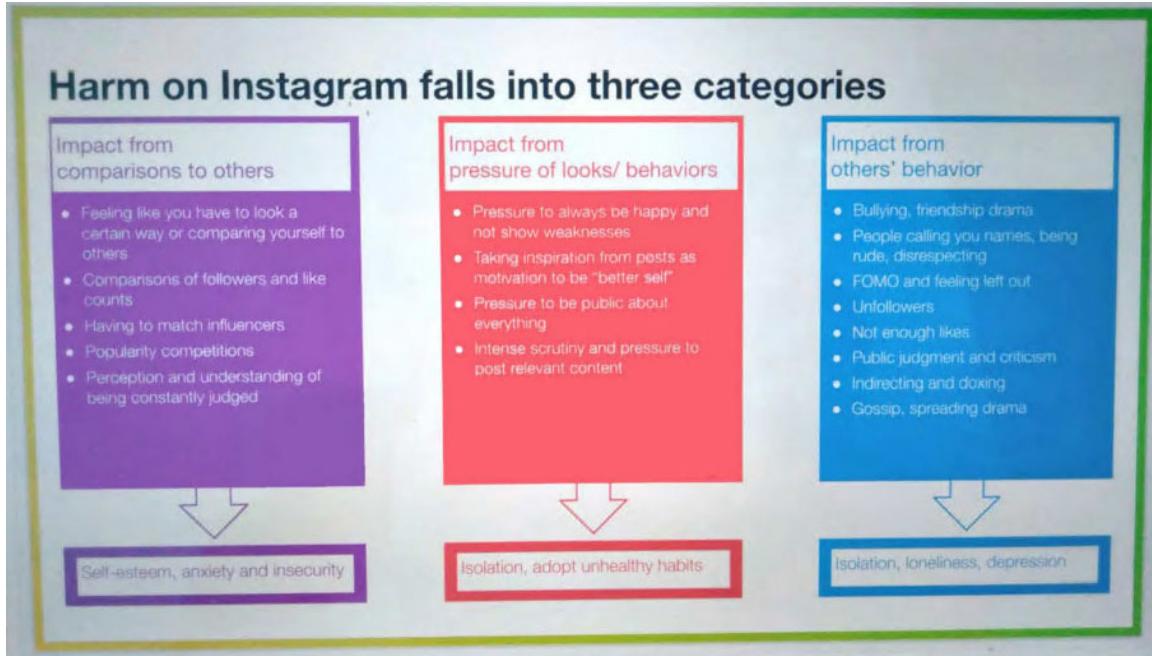
⁹ Instagram, *Teen Mental Health Deep Dive*, available at <https://s.wsj.net/public/resources/documents/teen-mental-health-deep-dive.pdf>



Teens blame Instagram for increases in the rates of anxiety and depression among teens

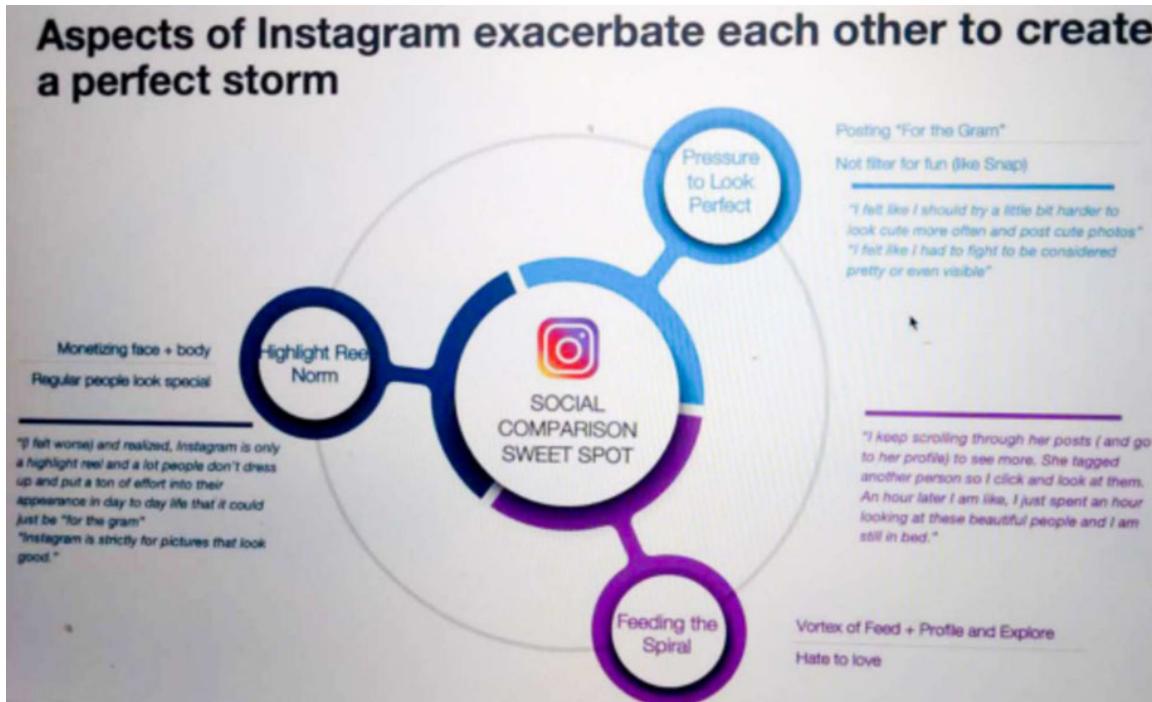
- This reaction was unprompted and consistent across all groups
- Constant comparison on Instagram is “the reason” why there are higher levels of anxiety and depression in young people
- Social comparison and perfectionism are nothing new, but young people are dealing with this on an unprecedented scale.
- The proliferation of new and different ways to compare themselves to others, combined with constant access to means that there is no way to escape social comparison on IG.
- For both boys and girls, this was called out as being the number one reason why IG is worse than other platforms for mental health. And, young people openly attribute their increased level of anxiety and depression to Instagram.

“The reason why our generation is so messed up and has higher anxiety and depression than our parents is because we have to deal with social media. Everyone feels like they have to be perfect.”
- UK Female



See, supra, “Teen Mental Health Deep Dive,” p. 18, 27, 32 (examples only).

65. The Instagram platform also has features known as “Reels” and “Stories, which promote the use of short videos and temporary posts, respectively. These features were developed to appeal to teens and Meta knows that the features coalesce into a toxic environment that is addictive and harmful:



Mental health outcomes related to this can be severe

Eating Disorders

"I keep looking at these images (spiral). (After getting off IG) I don't know, sometimes I just don't eat or try to eat less."

Body Dysmorphia

"I wish I had the money to get my nose/(other body parts) fixed."

Body Dissatisfaction

"(when I keep looking at these pictures) I feel like I am too big and not pretty enough."
"It makes me feel insecure about my body even though I know I am skinny."

Depression

"The constant judgement and jealousy can take you to a dark place."
"Some times (after spiralling) I just close my phone and lie on the bed."

Loneliness

"I feel like maybe (because I look like this) I don't have a boyfriend."
"I saw this kid with acne and he had friends! I didn't realize that was possible."

See, *supra*, *Teen Girls Body Image and Social Comparison on Instagram*, at 33-34.

66. Yet, aware of the mental health consequences for students, Meta prioritizes and promotes harmful engagement for increased revenues.

67. Instagram profile and privacy settings also cause harm. Users' profiles on Instagram may be public or private, which is a feature over which Meta exercises complete

control. On public profiles, any user can view the photos, videos, and other content posted by the user. On private profiles, the user's content may only be viewed by the user's followers, which the user must approve. For many years, Instagram profiles were public by default and Instagram allowed all users to message and send follow requests to underage users. But even now, when Instagram claims that it is defaulting certain categories of users into private profiles, all a user need do is change the profile setting and, once again, Instagram will allow all users to message and send follow requests to underage users. Meta can protect users from this specific harm, can do so immediately, and chooses to not do so as a matter of engagement and growth.

68. Permitting public profiles for underage users serves no critical purpose in terms of functionality but, instead, it increases user engagement during onboarding (when a user first starts using social media) by increasing user connections and generally by providing all users with greater access to other users, in this case, irrespective of their age. Unfortunately for young children and teens, a numerically significant percentage of those would-be connections are harmful. Defendants are aware of these harms and have opted not to make necessary and cost-effective changes to prevent it.

69. Instagram's Direct Message settings also permit and encourage harm to "vulnerable" users. Harmful and dangerous interactions occur because of the Instagram direct message feature and current user settings, that is, Meta's chosen settings provide predators and other bad actors with direct and unsupervised access to children and teens.

70. Instagram's allowance of multiple accounts, refusal to verify age, identity, even authenticity of email addresses further exacerbates the harm by making it impossible to avoid unwanted interactions. Other users can literally open accounts as fast as those

accounts can be blocked and, when coupled with the excessive and addictive usage habits Instagram promotes among teens, these features create a perfect storm for depression, anxiety, and Suicide and Self-Harm.

71. Instagram's push notifications and emails encourage compulsive and addictive behavior and are designed specifically to increase use of its social media platforms. In the case of Instagram, Defendant Meta collects individualized data – not just about the user, but also about the user's friends and contacts – and then selects content and notification frequency for its users and notifies them via text and email. Meta's notifications to individual users are specifically designed to, and do, prompt them to open Instagram and view the content Instagram selected, increasing sessions, and resulting in greater profits to Instagram. More to the point, even the format of these notifications has been designed and re-designed with the specific purpose of pulling users back onto the social media platform—irrespective of health or wellbeing.

72. Instagram also incorporates several features that appeal to students (*i.e.*, “likes” and filters, as well as avatars, emojis, and games) while simultaneously increasing social comparison pressure and resulting harm (*i.e.*, “likes” and filters). Meta knows that these features disproportionately harm teen girls and young women, yet Meta leadership—singularly focused on its economic bottom line—continued to reject change recommendations that would have better protected users against these harms.

73. Another example involves extensive testing Meta performed on its “like” button feature. Meta determined that its Instagram “like” feature is a source of social comparison harm for many of its users. This is not surprising given that several of the Meta employees involved in creating that feature have since left Meta and have spoken publicly

about the platform's addictive nature and harmfulness.¹⁰

74. What is surprising, however, is that Meta knows that its feature is harmful, particularly to teens and young adults, and could easily hide or remove that feature. But does not, for fear that hiding "likes" would result in lower engagement and less advertising revenue. This is a blatant example of Meta choosing its own profits over human life and, specifically, the health and well-being of a significant number of teens, including Plaintiff's students.

75. Instagram also creates images and GIFs for users to post on their videos and pictures. Meta has also acquired publishing rights to thousands of hours of music, which it provides to its users to attach to the videos and pictures that they post on Instagram. The GIFs, images, and music are integral to the user's Instagram post and are, in fact, designed to encourage posting. Indeed, in many cases, the only content in a user's Instagram post is the image, GIF or music supplied by Meta. When users incorporate images, GIFs, and music supplied by Meta into their postings, Meta functions as a co-publisher of such content. An Instagram user who incorporates images, GIFs or music supplied by Meta into their post is functionally equivalent to a novelist who incorporates illustrations into their story. Instagram can no longer characterize the images, GIFs, and music it supplies to its users as third-party content, just as the novelist cannot disclaim responsibility for illustrations contained in their book. Meta has made the deliberate decision to collaborate with its users in this regard and, as evidenced by Meta's internal documents, Meta's decision is motivated by the fact that such collaboration results in increased engagement and more profits for Meta itself.

¹⁰ See, e.g., <https://www.theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia>.

76. Meta knows that it is harming teens yet, when faced with recommendations that will reduce such harms, Meta's leadership consistently opts for prioritization of profit over the health and well-being of its teen users.

77. Meta knows that underage users are on its platforms and has deliberately designed its platforms to evade parental authority and consent, including but not limited to Meta's failure to verify age and identity, provision of multiple accounts, marketing aimed at informing minors that they can open multiple accounts, failure to provide a point of contact for parents to notify Meta of lack of consent, marketing aimed at children and that encourages children to use Meta's social media platforms without consent, and multiple other features and conduct by Meta aimed at ensuring young users have a means to access Meta's social media platforms no matter the circumstances.

78. Instagram is used by many millions of children every day, including students in Plaintiff's School District.

C. **YouTube and Its Manipulative Designs**

79. YouTube is an American online video sharing and social media platform headquartered in San Bruno, California. YouTube is the second most visited website, after Google Search, and has more than 2.5 billion monthly users who collectively watch more than one billion hours of videos on YouTube each day. Surveys by the Pew Research Center in 2022 found that 95% of American teenagers used YouTube and that one in five American teenagers reported that they used YouTube almost constantly.¹¹

80. Like Meta, YouTube earns the bulk of its YouTube revenue through

¹¹ Pew Research Center, Teens, Social Media and Technology 2022,
<https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

advertisements. Its design allows YouTube to embed targeted advertising directly into the video clips that its users watch, as well as promote featured content.¹²

81. YouTube partners with channel owners who, upon crossing a viewership threshold, can elect to monetize the channel to deliver advertisements to viewers. YouTube then takes a 45% cut of the advertising revenue and passes the rest to the channel.¹³ YouTube also offers systems, policies, and features to encourage creators to post more content and earn rewards that can be converted into cash.

82. Moreover, advertising on YouTube's channels can either be contextual (informed by the particular channel or video) or behavioral (informed by the behavior of the device owner as tracked across different websites, apps, and devices). YouTube has long allowed channel owners to turn off default behavioral advertising and serve instead contextual advertising that does not track viewers, but vanishingly few content creators would elect to do so, in no small part because they receive warnings that disabling behavioral advertising can "significantly reduce your channel's revenue." In short, both YouTube and the channels have a strong financial incentive to use behavioral advertising.

83. In fiscal years 2021 and 2022, YouTube generated total advertising revenues of \$28.8 billion and \$29.2 billion respectively. In stark contrast, the advertising revenues for fiscal year 2017 was \$8.1 billion.

84. YouTube uses several features and techniques to serve its goal of fueling

¹² Andrew Beattie, *How YouTube Makes Money Off Videos*, Investopedia, Oct. 31, 2021, <https://www.investopedia.com/articles/personal-finance/053015/how-youtube-makes-money-videos.asp>.

¹³ See *In the Matter of Google LLC and YouTube, LLC*, (F.T.C. Sept. 4, 2019), at 2 (citation omitted).

usage by minors (and ad revenues to YouTube), and does so by fueling compulsive, addictive use of YouTube by minors and push users into dangerous “rabbit hole” experiences.

85. YouTube has developed proprietary algorithms and uses those to push content to users based on secret formulas YouTube refuses to disclose. In a 2021 post on YouTube’s official blog, Cristos Goodrow, VP of Engineering at YouTube, described the algorithm in general terms as follows,

To provide such custom curation, our recommendation system doesn’t operate off of a ‘recipe book’ of what to do. It’s constantly evolving, learning every day from over 80 billion pieces of information we call signals. That’s why providing more transparency isn’t as simple as listing a formula for recommendations, but involves understanding all the data that feeds into our system. A number of signals build on each other to help inform our system about what you find satisfying: clicks, watchtime, survey responses, sharing, likes, and dislikes.¹⁴

86. At the same time, YouTube has actual knowledge that its algorithms are promoting and amplifying violent and harmful content. According to YouTube and Google insiders, YouTube employees have notified leadership of these defects in the YouTube algorithm and, each time such notice is provided, they are told by YouTube leadership “Don’t rock the boat.”¹⁵ In other words, YouTube is prioritizing engagement over user safety, despite actual knowledge of the harms it is causing.

87. According to YouTube insiders, “The company spent years chasing one business goal above others: ‘Engagement,’ a measure of the views, time spent and

¹⁴ Cristos Goodrow, *On YouTube’s recommendation system*, Inside YouTube, Sept. 15, 2021, <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

¹⁵ Mark Bergen, *YouTube Executives Ignored Warnings, Letting Toxic Videos Run Rampant*, Bloomberg, (Apr. 2, 2019), available at <https://www.bloomberg.com/news/features/2019-04-02/youtube-executives-ignored-warnings-letting-toxic-videos-run-rampant>.

interactions with online videos. Conversations with over twenty people who work at, or recently left, YouTube reveal a corporate leadership unable or unwilling to act on these internal alarms for fear of throttling engagement.” *Id.*

88. In 2012, YouTube concluded that the more people watched, the more ads it could run—and that recommending videos, alongside a clip or after one was finished, was the best way to keep eyes on the site. So YouTube, then run by Google veteran Salar Kamangar, set a company-wide objective to reach one billion hours of viewing a day, and rewrote its recommendation engine to maximize for that goal. *Id.*

89. YouTube doesn’t give an exact recipe for virality. But in its race to one billion hours, a formula emerged: Outrage equals attention. That is, YouTube re-designed itself to maximize addiction and stayed the course on programming its algorithm to prioritize engagement over user safety, despite its knowledge that such programming was harming a significant number of its users – including children and teens.

90. Nor is YouTube’s algorithm-driven experience a small part of its functionality. On the contrary, “YouTube has described its recommendation system as artificial intelligence that is constantly learning which suggestions will keep users watching. These recommendations, it says, drive 70 percent of views, but the company does not reveal details of how the system makes its choices.”¹⁶

91. YouTube’s automated recommendation system drives most of the experience users have on the platform by telling users, like Plaintiff’s students, what they should watch next. It pushes videos to minor users and exposes them to content they

¹⁶ Max Fisher & Amanda Taub, *On YouTube’s Digital Playground, an Open Gate for Pedophiles*, N.Y. Times, (June 3, 2019), available at <https://www.nytimes.com/2019/06/03/world/americas/youtube-pedophiles.html>.

otherwise would not see.

92. As with Defendant Meta, Snap, and TikTok, YouTube's algorithms determine the content that gets directed and/or populates its user experience on the YouTube social media platform. YouTube, not the creator, generates the URLs for the content and the resulting list of URLs pushed to users. This includes content sent directly from YouTube to its users, for YouTube's own purposes, and outside of any specific user search or request for such content. And as with Defendants Meta, Snap, and TikTok, YouTube knows that its algorithms are promoting and amplifying harmful content to children and teens and are operating with a degree of algorithmic discrimination that is particularly harmful to YouTube's most vulnerable user groups, like Plaintiff's students.

93. YouTube knows that underage users are on its YouTube platform and has deliberately designed its platform in a manner intended to evade parental authority and consent.

94. YouTube is used by many millions of children every day, including students in Plaintiff's schools, who have become addicted to it and suffered other severe mental harms as a result of how Alphabet has designed, setup, and operates its platform design and features.

D. Snapchat and Its Manipulative Designs

95. Snapchat was founded in 2011, by three college students, and quickly became a wildly popular social media platform among U.S. teens. It is one of the most widely used social media platforms in the world and is used by more than 59% of all U.S. teens

(age 13 to 17).¹⁷ Snapchat's headquarters is in Santa Monica, California.

96. Snapchat started as a photo and short video sharing social media application that allows users to form groups and share posts or "Snaps" that disappear after being viewed by the recipients. Snapchat became well-known for its self-destructing content feature. Specifically, Snapchat allows users to form groups and share posts or "Snaps" that disappear after being viewed by the recipients. However, Snapchat quickly evolved from there, as its leadership made design changes and rapidly developed new features intended to and that did increase Snapchat's popularity among teen users.

97. In 2012, Snap added video capabilities to Snapchat, pushing the number of "snaps" to 50 million per day; in 2013, "Stories" and "Chat" features; in 2014, live video chat capabilities, "Our Story," Geofilters and Community Geofilters, and Snapcash.

98. By 2015, advertisements were pervasive on Snapchat and, by 2018, 99% of Snap's total revenue came from advertising, according to internal company records. In other words, like Meta, Snap decided to monetize its userbase and, from that point forward, began changing in ways that made it even more harmful to users but that paved the way for growth, engagement, and profits for Snap and its leadership and investors.

99. By 2015, Snapchat had over 75 million monthly active users and was the most popular social media application amongst American teenagers in terms of number of users and time spent using the platform. Snap currently estimates having between 92.8 and 96.6 million users in the United States, with at least 17 to 17.7 million of those being children

¹⁷ Emily A. Vogels, Risa Gelles-Watnick, Navid Massarat, *Teens, Social Media and Technology 2022*, Pew Research Center (Aug. 10, 2022), available at <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

under the age of 18. Against this backdrop, Snap advertises and promotes its platform as safe and fun—which could not be further from the truth.

100. Snap uses an algorithm or similar technology to suggest connections, that is, Snap sends messages to users based on some secret formula Snap uses to determine whether someone should “friend” someone else. This is known as “Quick Add,” and these Snap- initiated messages result in exposure to harmful contacts, bullying, and dangerous predators. This feature contributes nothing to the platform itself and serves no informational or communication purpose. Similar to Meta’s conduct, this is designed to reinforce addiction and increase the odds of maintaining more users for longer.

101. Snapchat users also have an “Explore” feed that displays content created by other users around the world. These features are designed to grab and keep users’ attention for as long as possible each day, and have led many people, from psychologists to government officials, to describe Snapchat as “dangerously addictive.”

102. Snapchat offers several unique messaging and data features. It is perhaps most famous for its self-destructing content design feature, which appeals to minors and makes it more difficult for parents to monitor their children’s social media activity. This is an inherently dangerous features because it both encourages and allows minor users to exchange harmful, illegal, and sexually explicit images with adults, and provides those same adults with a safe and efficient vehicle to recruit victims. Snapchat is a go-to application for sexual predators because of this feature.

103. For years Snap has received reports of child abuse and bullying occurring

through its platform and because of its features,¹⁸ yet has kept those features in place as removing them would result in considerable impact on the popularity of Snap.

104. Harmful and dangerous interactions likewise occur because of these and other Snapchat messaging features, which provide direct and unsupervised access to children and teens.

105. But also, this is a dangerous feature because it does not operate as advertised. Snap's disappearing design and marketing of this feature is particularly harmful to teens who rely on Snap's representations when taking and sending photos, only learning after the fact that recipients have means to save photos – and are often bullied, exploited, and/or sexually abused as a direct result. These are harms known to Snap.

106. In 2014, Snapchat added "Stories" and "Chat" features that allowed users to post longer stories that could be viewed by users outside the user's friends. As with Meta's algorithms, Snap's technology promotes and amplifies harmful content as a means of increasing user engagement and growth opportunities. Snap has actual knowledge of the harm it is causing its users, and consistently prioritizes its own profits regardless.

107. Snapchat also allows users to enable the sharing of their location, through a tool called Snap Map, which allows the users' followers (and the public for Snaps submitted by the users) to see the user's location on a map. At all times relevant, this feature was available to all users, including minors. This is an inherently dangerous feature, which serves no practical purpose – but that does provide strangers and predators with access to the

¹⁸ Zak Doffman, *Snapchat Has Become A 'Haven for Child Abuse' with its 'Self-Destructing Messages'*, Forbes (May 26, 2019), available at <https://www.forbes.com/sites/zakdoffman/2019/05/26/snapchats-self-destructing-messages-have-created-a-haven-for-child-abuse/>.

location of minor victims. This feature has directly contributed to stalking and other, physical harms and assaults perpetrated on minors, and these are harms known to Snap.

108. But also, Snap has developed artificial intelligence technology that detects adult users of Snapchat who send sexually explicit content to children and receive sexually explicit images from children. This technology furnishes Snap with actual knowledge that a significant number of minor users of Snapchat are solicited to send, and do send, sexually explicit photos and videos of themselves to adult users in violation of 18 U.S.C. § 1591(a)(1)-(2). Snap *could* protect its minor users, but in many instances, does not.

109. Snap also has a “My Eyes Only” functionality, which many parents do not know about. Snap’s My Eyes Only encourages and enables young users to hide harmful content from parents by allowing them to hide content in a special tab that requires a passcode, and where content cannot be recovered – even by Snap itself – without the correct passcode. The content self-destructs if a user attempts to access the hidden folder with the wrong code. My Eyes Only has no practical purpose or use, other than to hide potentially harmful content from parents and/or legal owners of the devices used to access Snap. Moreover, while this information and evidence should be in Snap’s possession and control, it has designed this feature in a way that causes the permanent loss of relevant and often incredibly material and incriminating evidence.

110. On information and belief, Snap’s disappearing messages are defective for this reason as well. Snap has possession, custody, or control of that data, knows that it will be relevant and material in the event of litigation, but has designed its technologies – *i.e.* its advertised “disappearing” functionality which suggests that Snap itself no longer has access to such data – in a manner that frustrates and actively prevents parents from

monitoring the activity of their underage children on Snap. These are serious defects, which Snap should be required to remedy immediately.

111. Like Meta and TikTok, Snap also sends push notifications and emails to encourage addictive behavior and to increase use of Snapchat. Snap's communications are triggered and based upon information Snap collects from and about its users, and Snap "pushes" these communications to teen users in excessive numbers and disruptive times of day. These notifications are specifically designed to, and do, prompt them to open Snapchat and view the content Snapchat selected, increasing sessions, and resulting in greater profits to Snap. Even the format of these notifications has been designed to pull users back on to the social media platform—irrespective of a user's health or wellbeing.

112. Snapchat also features a series of rewards including trophies, streaks, and other signals of social recognition similar to the "likes" metrics available across other platforms. These features are designed to encourage users to share their videos and posts with the public. Moreover, these features serve no communication or informational purposes. They are designed to be addictive, and to encourage greater use of Snapchat without regard to any other content or third-party communication. While the names of these various metrics have changed over time, and certain metrics have been phased out and others phased in, their core collective function—rewarding harmful over engagement with Snapchat—has never changed.

113. These features serve no purpose other than creating dependencies on Snap by children and teens, which dependencies in turn cause sleep deprivation, anxiety, depression, anger, shame, interpersonal conflicts, and other serious harms to mental and physical health.

114. Snapchat incorporates several other features that serve no functionality purpose, but that do make Snap more appealing to children and teens (*i.e.*, avatars, emojis, and games) while simultaneously using known mechanisms to addict those same children and teens (*i.e.* streaks and trophies offering unknown rewards). These features and the ones discussed above were particularly addictive to youths and were targeted to underage users.

115. The Snap Streak feature is unique to Snap and is one of the most – if not the most – addictive features available especially to teenagers. Snap knows that Snap Streak is addictive and has known for years but continues to provide that feature to teens and children.

116. These are just some examples of Snapchat's harmful features.

117. Snap has also developed images for users to decorate the pictures or videos they post, and Snap has developed Lenses which are augmented reality-based special effects and sounds for users to apply to pictures and videos users post on Snapchat, and World Lenses to augment the environment around posts. Snap also has acquired publication rights to music, audio, and video content that its users can incorporate in the pictures and videos they post on Snapchat

118. These images, Lenses, and licensed audio and video content supplied and created by Snapchat frequently make a material contribution to the creation or development of the user's Snapchat posts. Indeed, in many cases, the *only* content in a user's Snapchat post are images, Lenses, and licensed audio and video content supplied and created by Snapchat. When users incorporate images, Lenses, music, audio, and video content supplied by Snapchat posts, Snapchat makes a material contribution to the creation and/or development of their Snapchat postings and becomes a co-publisher of such content. When minor users incorporate images, Lenses, music, audio, and video content supplied by

Snapchat to their posts, this enhances the psychic harm and defamatory sting that minor users experience from third-party postings on Defendant's platform.

E. TikTok and Its Manipulative Designs

119. TikTok is a video sharing social media application where users create, share, and view short video clips. Known in China as Douyin, TikTok hosts a variety of short-form user videos, from genres like pranks, stunts, tricks, jokes, dance, and entertainment with durations from 15 seconds to ten minutes. TikTok is the international version of Douyin, which was originally released in the Chinese market in September 2016. In or around 2017, TikTok was launched for iOS and Android in most markets outside of mainland China; however, it became available worldwide only after merging with another Chinese social media service, Musical.ly, on August 2, 2018

120. TikTok was ranked by Cloudflare as the most popular website of 2021. "TikTok was the world's most- visited website in 2021, overtaking YouTube in US watch time and Facebook in app downloads for the first time."

121. Users on TikTok who open the TikTok application are automatically shown an endless stream of videos selected by an algorithm developed by TikTok to show content on the "For You" page based upon the user's demographics, likes, and prior activity on the app.

122. TikTok is like Meta and Snap in that it has designed its algorithms to addict users and cause them to spend as much time on the application as possible through advanced analytics that create a variable reward system tailored to user's viewing habits and interests.

123. There are four main goals for TikTok's algorithm: which the company translates as "user value," "long-term user value," "creator value," and "platform value."

124. An internal TikTok document was leaked, which document is titled “TikTok Algo 101.”¹⁹ This document was created by TikTok’s engineering team in Beijing and offers details about both the app’s mathematical core and insight into the company’s understanding of human nature. The document explains that in the pursuit of the company’s “ultimate goal” of adding daily active users, it has chosen to optimize for two closely related metrics in the stream of videos it serves: “retention”—that is, whether a user comes back—and “time spent.” The document offers a rough equation for how videos are scored, in which a prediction driven by machine learning and actual user behavior are summed up for each of three bits of data: likes, comments and playtime, as well as an indication that the video has been played.

125. A recent Wall Street Journal report revealed how TikTok relies heavily on how much time users spend watching each video to steer them toward more videos that will keep them scrolling, and that process can sometimes lead young viewers down dangerous rabbit holes and toward content that promotes suicide or self-harm.

126. Another article, by the New York Times, explained how TikTok markets itself as an “artificial intelligence company.” “The most obvious clue is right there when you open the app: the first thing you see isn’t a feed of your friends, but a page called ‘For You.’ It’s an algorithmic feed based on videos you’ve interacted with, or even just watched. It never runs out of material. It is not, unless you train it to be, full of people you know, or things you’ve explicitly told it you want to see. It’s full of things that you seem to have demonstrated you want to watch, no matter what you actually say you want to watch … Imagine a version

¹⁹ Ben Smith, *How TikTok Reads Your Mind*, New York Times (Dec. 5, 2021), available at <https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html>.

of Facebook that was able to fill your feed before you'd friended a single person. That's TikTok.”²⁰ Another article by the New York Times confirms, “The FYP algorithm is TikTok’s secret sauce, and a big part of what makes it so accurate is ByteDance’s global reach. Every swipe, tap and video viewed by TikTok users around the world — billions and billions of data points a day — is fed into giant databases, which are then used to train artificial intelligence to predict which videos will keep users’ attention.”²¹

127. TikTok also features and promotes various “challenges” where users film themselves engaging in behavior that mimics and “one ups” other users posting videos related to a particular challenge. TikTok promotes users creating and posting videos of challenges identified by a system of hashtags that are promoted within TikTok’s search feature.

128. TikTok’s app and algorithm have created an environment in which TikTok “challenges” are widely promoted and result in maximum user engagement and participation, thus financially benefiting Defendants. At the same time TikTok “challenges” involve users filming themselves engaging in behavior that mimics and often times “one-ups” other users posting videos performing the same or similar conduct, and these TikTok “challenges” routinely involve dangerous or risky conduct.

129. TikTok’s algorithm presents these often-dangerous “challenges” to users on their FYP and encourages users to create, share, and participate in the “challenge.”

²⁰ John Herrman, *How TikTok is Rewriting the World*, New York Times (Mar. 10, 2019), available at <https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html>.

²¹ Kevin Roose, *Is TikTok a Good Buy? It Depends on What’s Included*, New York Times (Aug. 5, 2020), available at <https://www.nytimes.com/2020/08/05/technology/tiktok-deal-algorithm.html>.

130. These are just some examples of how TikTok operates to generate profit, at the expense of the health and well-being of its users, particularly its child and teen users.

131. Until mid-2021, TikTok also and by default made all users profiles “public,” meaning that strangers, often adults, could view and message underage users of the TikTok app. This also meant that those strangers could then contact children directly, as happened in this case.

132. TikTok has also developed artificial intelligence technology that detects adult users of TikTok who send sexually explicit content to children and receive sexually explicit images from children. This technology furnishes TikTok with actual knowledge that a significant number of minor users of TikTok are solicited to send and actually do send sexually explicit photos and videos of themselves to adult users in exchange for consideration in violation of 18 U.S.C. § 1591(a)(1)–(2). Yet, like Snap and Meta, TikTok uses this technology selectively and only when it is to the benefit of TikTok, enabling harms through its social media platforms in the interest of engagement.

133. Like Meta and Snap, TikTok also sends push notifications and emails to encourage addictive behavior and to increase use of TikTok. TikTok’s communications are triggered and based upon information TikTok collects from and about its users, and TikTok “pushes” these communications to teen users in excessive numbers and at disruptive times of day. These notifications are specifically designed to, and do, prompt them to open TikTok and view the content TikTok selected, increasing sessions, and resulting in greater profits to TikTok. Even the format of these notifications has been designed to pull users back on to the social media platform—irrespective of a user’s health or wellbeing.

134. TikTok markets itself as a family friendly social media application, and

markets to children and teens.

135. TikTok exclusively controls and operates the TikTok platform for profit, which like Instagram and Snapchat, creates advertising revenue through maximizing the amount of time users spend on their platforms. Accordingly, while TikTok purports to have a minimum age requirement of 13-years-old, it does little to verify user age or enforce its age limitations despite knowledge that underage use is widespread.

136. In fact, underage TikTok users will often post videos of themselves in which they clearly are not old enough to be using TikTok. TikTok has actual knowledge of underage users. For example, in July 2020, TikTok reported that more than a third of its 49 million daily users in the United States were 14 years old or younger. And while some of those users were 13 or 14, at least one former employee reported that TikTok had actual knowledge of children even younger based on videos posted on the TikTok platform – yet failed to promptly take down those videos or close those accounts. In fact, TikTok regularly knows or should know of underage users with accounts and who post videos on its platform, whether because of its algorithms, viewing by TikTok employees, and/or flagging by other TikTok users. In many such instances, TikTok does not suspend the account, require age verification, or notify the underage user's parents of such prohibited use.

137. TikTok does not seek parental consent for underage users or provide warnings or adequate controls that would allow parents to monitor and limit the use of TikTok by their children. TikTok does not verify user age, enabling and encouraging teens and children to open TikTok accounts, providing any age they want, without parental knowledge or consent.

138. Further, based on TikTok data leaked to the New York Times, internal

TikTok documents show that the number of daily U.S. users in July of 2020 estimated by TikTok to be 14 or younger—18 million—was almost as large as the number of over-14 users, around 20 million. While the rest of TikTok’s U.S. users were classified as being “of unknown age.”²²

139. TikTok also does not rely on users’ self-reported age to categorize them, and knows when it has underage users engaged in harmful activities on its platform. Like Meta, TikTok has algorithms through which it creates estimated or approximate age for its users, including facial recognition algorithms that scrutinize profile pictures and videos, as well as other methods through which it can estimate age with reasonable certainty. TikTok knows that users under the age of 13 are using its social media platform, including to post videos of themselves, which videos are public by default and result in harm to these underage users.²⁰

140. Like Meta and Snap, TikTok has tried to boost engagement and keep young users hooked to its social media platform by any means necessary.

141. TikTok has also developed memes and other images for users to apply to images and videos they post on TikTok. TikTok also has acquired publication rights to music that its users can incorporate in the pictures and videos they post on TikTok. When users incorporate images, memes, and music supplied by TikTok into their postings, TikTok becomes a co-publisher of such content. A TikTok user who incorporates images, memes and musical content supplied by TikTok into their posts is functionally equivalent to a novelist who incorporates illustrations into her story. TikTok can no longer characterize

²² Raymond Zhong, Sheera Frankel, *A Third of TikTok’s U.S. Users May Be 14 or Under, Raising Safety Questions*, New York Times (Aug 14, 2020), available at <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html>.

the images, memes, and musical content it supplies to its users as third-party content as the novelist can disclaim responsibility for illustrations contained in her book.

142. TikTok knows that it is harming teens yet consistently opts for prioritization of profit over health and well-being of its teen users—the millions of teen users who continue to use its inherently dangerous and defective social media platform every single day.

143. Indeed, as evidenced by ByteDance's Chinese version of TikTok (Douyin), protections are available.²³

144. TikTok consciously disregards any duty to protect Plaintiff's students.

V. **DEFENDANTS' BUSINESS MODELS MAXIMIZE USER SCREEN TIME FUELING ADDICTION**

145. Each Defendant advertises and portrays their platforms as "free," because they do not charge their users for downloading or using their platforms. What many users do not know is that, in fact, Defendants generate massive revenues by finding unique and increasingly dangerous ways to capture user attention and target advertisements to their users. Defendants receive revenue from advertisers who pay a premium to target advertisements to exploit specific user behavior and demographic groups.

146. The amount of revenue Defendants receive is based upon the amount of time and level of user engagement on their platforms, which directly correlates with the number of advertisements that can be shown to each user.

147. Defendants use unknown and changing rewards that are designed to prompt users who consume their social media platforms in excessive and dangerous ways.

²³*China: Children given daily time limit on Douyin – its version of TikTok*, BBC (Sept. 20, 2021), available at <https://www.bbc.com/news/technology-58625934>.

Defendants know, or in the exercise of ordinary care should know, that their designs have created extreme and addictive usage by their minor users, and Defendants knowingly or purposefully designed their platforms to encourage such addictive behaviors. For example, all the achievements and trophies in Snapchat are unknown to users. The Company has stated that “[y]ou don’t even know about the achievement until you unlock it.” This design conforms to well-established principles of operant conditioning wherein intermittent reinforcement provides the most reliable tool to maintain a desired behavior over time.

148. This design is akin to a slot machine but marketed toward minor users who are even more susceptible than gambling addicts to the variable reward and reminder system designed by Snapchat. The system is designed to reward increasingly extreme behavior because users are not actually aware of what action will unlock the next award.

149. Facebook and Instagram, like Snapchat and TikTok, are designed around a series of features that do not add to the communication utility of the application, but instead seek to exploit minor users’ susceptibility to persuasive design and unlimited accumulation of unpredictable and uncertain rewards, including “likes” and “followers.” In the hands of children, this design is unreasonably dangerous to the mental well-being of underage users’ developing minds, and has resulted in mental health harms to youths in Plaintiff’s schools.

150. According to industry insiders, Meta, YouTube, Snap and TikTok have employed thousands of psychologists and engineers to help make their platforms maximally addicting. For example, Instagram’s “pull to refresh” is based on how slot machines operate. It creates an endless feed, designed to manipulate brain chemistry and prevent natural end points that would otherwise encourage users to move on to other

activities.²⁴

151. Meta, YouTube, Snap and TikTok do not warn users of the addictive design of their systems. On the contrary, Meta, YouTube, Snap and TikTok actively conceal the dangerous and addictive nature of their platforms, lulling users and parents into a false sense of security. This includes consistently playing down their platforms' negative effects on teens in public statements and advertising, making false or materially misleading statements concerning safety, and refusing to make their research public or available to academics or lawmakers who have asked for it.

152. Meta, YouTube, Snap and TikTok have repeatedly represented to the public and governments around the world that their platforms are safe and not addictive. Even now, YouTube represents that it enforces its "Community Guidelines using a combination of human reviewers and machine learning," and that its policies "aim to make YouTube a safer community ..."

153. TikTok represents in its community guidelines that its priority is "safety, diversity, inclusion, and authenticity," and Snap's Terms of Service claim "We try hard to keep our Services a safe place for all users."

154. Again, the amount of revenue Defendants receive is based upon the amount of time and user engagement on their platforms, which directly correlates with the number of advertisements that can be shown to each user. In short, Meta, YouTube, Snap and TikTok opt for user engagement over the truth and user safety.

²⁴ Daniel Kruger, Ph.D., M.S., *Social Media Copies Gambling Method 'to create psychological cravings'*, University of Michigan Institute for Healthcare Policy & Innovation (May 8, 2018), available at <https://ihpi.umich.edu/news/social-media-copies-gambling-methods-create-psychological-cravings>.

155. Meta, YouTube, Snap and TikTok's social media platforms are built around a series of design features that do not add to the communication and communication utility of the applications, but instead seek to exploit users' susceptibility to persuasive design and unlimited accumulation of unpredictable and uncertain rewards (including things like "likes" and "followers" and "views" and "streaks" and "trophies" as well as YouTube's design layout and showcasing of multiple recommended videos at one time. As recently detailed by the FTC, these design features are manipulative dark patterns than can deceive users into staying on the application and steer certain usage of the platform.²⁵ Moreover these designs are unreasonably dangerous to the mental well-being of underage users' developing minds, and these social media companies know it.

156. Meta, YouTube, Snap and TikTok know that their platforms are addictive, and that millions of teen users want to stop using them but cannot.

157. Meta, YouTube, Snap and TikTok engineer their platforms to keep users, and particularly young users, engaged longer and coming back for more. This is referred to as "engineered addiction," and examples include features like bottomless scrolling, tagging, notifications, and live stories.

158. Meta, YouTube, Snap and TikTok spend billions of dollars marketing their platforms to minors, and have deliberately traded in user harm for the sake of their already astronomical revenue stream.

²⁵ FTC Staff Report, *Bringing Dark Patterns to Light*, FTC Bureau of Consumer Protection (September 2022), available at https://www.ftc.gov/system/files/ftc_gov/pdf/P214800%20Dark%20Patterns%20Report%209.14.2022%20-%20FINAL.pdf.

VI. DEFENDANTS HAVE CHOSEN DESIGNS TO ADDICT TEEN USERS

159. Meta, YouTube, Snap and TikTok have intentionally designed their platforms to maximize users' screen time, using complex algorithms or other design features designed to exploit human psychology and driven by the most advanced computer algorithms and artificial intelligence available to four of the largest technology companies in the world.

160. Meta, YouTube, and TikTok's algorithms select content for minor users not based on what they anticipate the user will prefer or to enhance their social media experience, but rather for the express purpose of habituating users to the Defendants' social media platforms. Meta, YouTube, and TikTok's algorithms do not provide a neutral platform but rather specify and prompt the type of content to be submitted and determine particular types of content its algorithms promote.

161. Meta, YouTube, Snap and TikTok designed and have progressively modified their platforms to promote problematic and excessive use that they know is indicative of addictive and self-destructive use.

162. One of these features—present in YouTube, Facebook, Instagram, and TikTok—is the use of complex algorithms to select and promote content that is provided to users in an unlimited and never-ending “feed.” Defendants are well aware that algorithm-controlled feeds promote unlimited “scrolling”—a type of use those studies have identified as detrimental to users’ mental health—however, this type of use allows Defendants to display more advertisements and obtain more revenue from each individual user.

163. Meta, YouTube, and TikTok's algorithm-controlled features are designed to promote content most likely to increase user engagement, which often means content that

Defendants know to be harmful to their users. This is content that users would otherwise never see but for Defendant's sorting, prioritizing, and/or affirmative pushing of such content to their accounts.

164. In the words of one, high-level departing Meta employee,

In September 2006, Facebook launched News Feed. In October 2009, Facebook switched from chronological sorting to an algorithmic ranking. 10 years later, in July 2019, Sen. Josh Hawley introduced a bill to the US Senate that would ban features in app feeds, such as infinite scroll.

The response in 2006 was largely positive; the response in 2009 was negative from a vocal minority, but still largely positive; the response in 2019 was largely “lol, wut?” If I had to guess, the response to government regulation around engagement centric information feeds in 2026 will be “Omg finally”.

“Why We Build Feeds” (October 4, 2019), at p. 1.²⁶

165. The addictive nature of Meta, YouTube, Snap and TikTok’s platforms and the complex and psychologically manipulative design of their algorithms is unknown to ordinary consumers, particularly minors.

166. Meta, YouTube, Snap and TikTok go to significant lengths to prevent transparency, including posing as a “free” social media platform, burying advertisements in personalized content, and making public statements about the safety of their platforms that simply are not true.

167. Meta, YouTube, and TikTok’s algorithms adapt to promote whatever content will trigger minor users’ engagement and maximize their screen time. Defendants’

²⁶ https://www.documentcloud.org/documents/21600853-tier1_rank_exp_1019

algorithm designs do not distinguish, rank, discriminate, or prioritize between particular content based on whether it is helpful or harmful to the psychic well-being of their minor users. Once a minor user engages with abusive, harmful, or destructive content, Defendants' algorithms will direct the minor user to content that is progressively more abusive, harmful, and destructive to maximize the user's screen time.

168. Meta, YouTube, and TikTok's algorithms are not simply tools meant to facilitate the communication and content of others but are content in and of themselves. Meta, YouTube, and TikTok's algorithms do not function like traditional search engines that select particular content for users based on user inputs; they direct minor users to content based on far more than the individual users' viewing history. Meta, YouTube, and TikTok's algorithms make recommendations not simply based on minor users' voluntary actions but also the demographic information and social media activity of the users' friends, followers, and cohorts. The user data that Meta, YouTube, and TikTok's algorithms use to select content therefore encompasses far more information than voluntarily furnished by the particular user and include private information about the user that Meta, YouTube, and TikTok discover through undisclosed surveillance of behavior both online and offline.

169. These addiction-driving algorithms adapt to the social media activity of individual users to promote *whatever* content will trigger a particular user's interest and maximize their screen time. That is, prior to the point when Meta, YouTube, and TikTok have addicted their users and are then able to influence user preferences, their algorithm designs do not distinguish, rank, discriminate, or prioritize between types of content. For example, if the algorithm can increase User One engagement with elephants and User Two engagement with moonbeams, then Defendants' algorithm design will promote elephant

content to User One and moonbeam content to User Two. These types of algorithms are solely quantitative devices and make no qualitative distinctions between the nature and type of content they promote to users – as long as those promotions increase user engagement.

VII. HARM TO MINOR USERS FROM INTERACTION WITH DEFENDANTS' PLATFORMS

A. Every Year, American Youths Increase Their Usage of Defendants' Platforms

170. Today's youth mental health crisis caused by Defendants began before the pandemic.

171. The crisis then deepened and worsened during the pandemic, as school children spent more and more time online, thus increasing the exposure to Defendants' manipulations.

172. Prior to the global pandemic, American adolescents increasingly used media for substantial portions of their day, increasing usage by 3% per year for tweens and 11% per year for teens.²⁷ Following 2019, media usage exploded at a staggering 17% per year pace, with an average of 8 hours and 39 minutes of daily usage by teens in 2021.²⁸ Reviews of global studies confirm drastic increases in screen usage as social interactions shifted online.²⁹

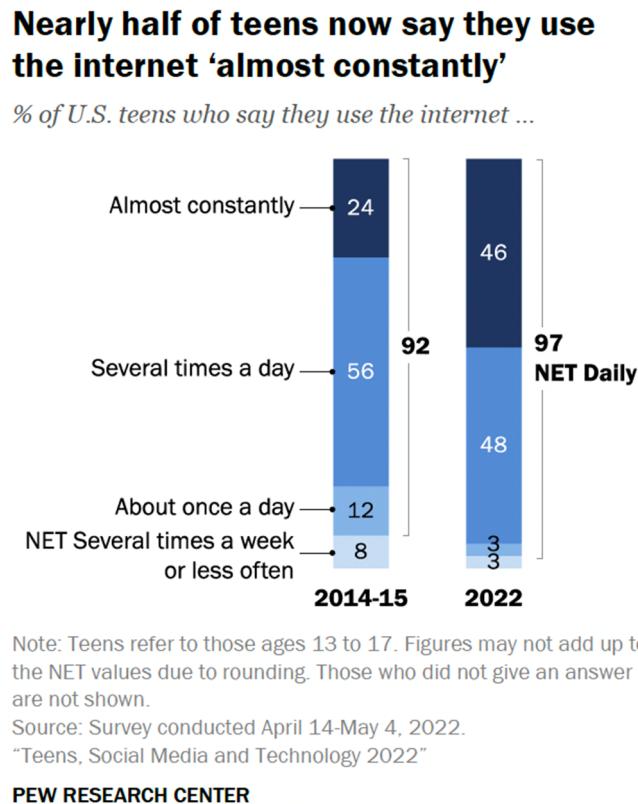
²⁷ *The Common Sense Census: Media Use by Tweens and Teens*, Common Sense (2021), available at https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf.

²⁸ *Id.*

²⁹ A review of 46 research studies globally found that on average screen time for children and adolescents increased by 52% (84 minutes per day) during the pandemic. See Sheri Madigan, Rachel Elrich, Paolo Pador, et al., *Assessment of Changes in Child and Adolescent Screen Time During the Covid-19 Pandemic*, JAMA Pediatr. (Nov. 7, 2022), available at <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2798256>.

173. A comparison of Pew Research studies from 2014-2015 to studies in 2022

confirms a stark increase in the proportion of time spent online by teens:³⁰



174. As part of that extreme growth in overall media usage, social media usage and dependence increased, with 54% of teens saying it would be hard to give up social media.³¹ Pew Research studies from 2018 similarly confirm a staggering jump in recent years.³²

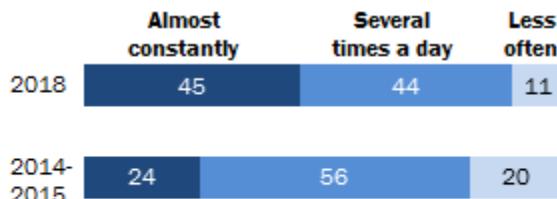
³⁰ Emily A. Vogels, Risa Gelles-Watnick, and Navid Massarat, *Teens, Social Media and Technology 2022*, Pew Research Center (Aug. 10, 2022), available at <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

³¹ *Id.*

³² *Teens, Social Media and Technology 2018*, Pew Research Center (May 31, 2018), available at <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/> (“2018 Pew Research on Teen Social Media”).

45% of teens say they're online almost constantly

% of U.S. teens who say they use the internet, either on a computer or a cellphone ...



Note: "Less often" category includes teens who say they use the internet "about once a day," "several times a week" and "less often."

Source: Survey conducted March 7-April 10, 2018. Trend data from previous Pew Research Center survey conducted 2014-2015.

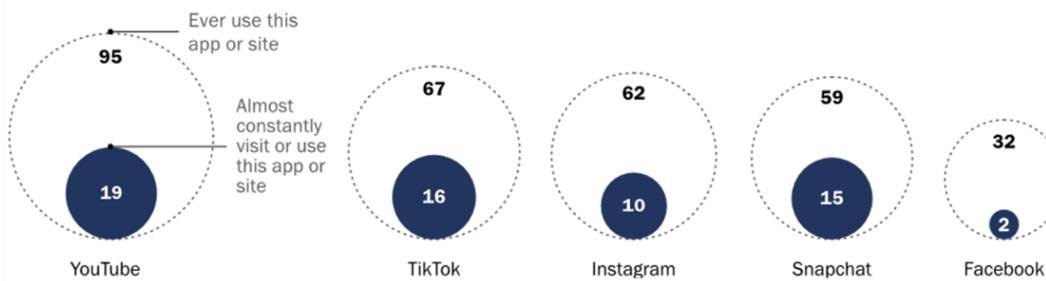
"Teens, Social Media & Technology 2018"

PEW RESEARCH CENTER

175. As part of this explosion of teen online usage, significant proportions of teens report using Defendants' social media platforms constantly.

About one-in-five teens visit or use YouTube 'almost constantly'

% of U.S. teens who say they ...



Note: Teens refer to those ages 13 to 17. Those who did not give an answer or gave other responses are not shown.

Source: Survey conducted April 14-May 4, 2022.

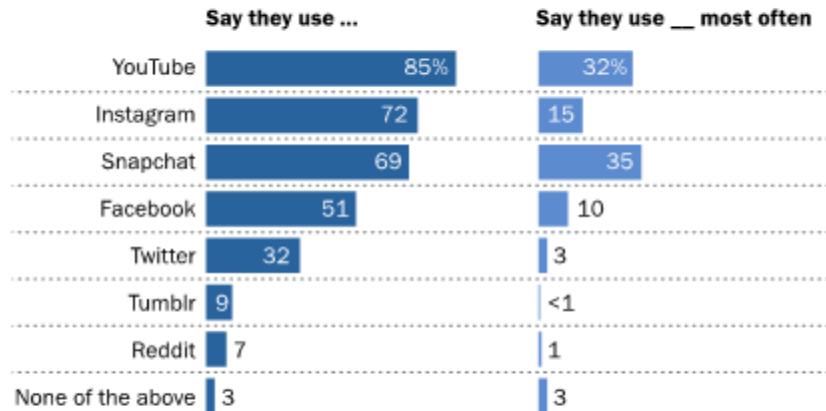
"Teens, Social Media and Technology 2022"

PEW RESEARCH CENTER

176. The specific mix of platform jumps on the current trends, with TikTok not even registering in 2018 surveys but being the second highest used platform in 2022.

YouTube, Instagram and Snapchat are the most popular online platforms among teens

% of U.S. teens who ...



Note: Figures in first column add to more than 100% because multiple responses were allowed. Question about most-used site was asked only of respondents who use multiple sites; results have been recalculated to include those who use only one site. Respondents who did not give an answer are not shown.

Source: Survey conducted March 7-April 10, 2018.

"Teens, Social Media & Technology 2018"

PEW RESEARCH CENTER

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177. Yet as discussed above, each of the platforms replicate each other in the race for teen users, often adopting mechanisms introduced by one another in order to keep the most users on their platforms.

178. Importantly, despite this explosion in usage for teens, teens have reported a *decreasing enjoyment of usage of social media as their usage has increased.*³⁴

B. Incomplete Brain Development Renders Adolescents Particularly Susceptible to Manipulation

179. The human brain is still developing during adolescence in ways consistent with adolescents' demonstrated psychosocial immaturity. Specifically, adolescents' brains

³³ See 2018 Pew Research on Teen Social Media.

³⁴ See 2021 The Common Sense Census at Table D.

are not yet fully developed in regions related to risk evaluation, emotional regulation, and impulse control.

180. The frontal lobes—and, in particular, the prefrontal cortex—of the brain play an essential part in higher-order cognitive functions, impulse control, and executive decision-making. These regions of the brain are central to the process of planning and decision-making, including the evaluation of future consequences and the weighing of risk and reward. They are also essential to the ability to control emotions and inhibit impulses. MRI studies have shown that the prefrontal cortex is one of the last regions of the brain to mature.

181. During childhood and adolescence, the brain is maturing in at least two major ways. First, the brain undergoes myelination, the process through which the neural pathways connecting different parts of the brain become insulated with white fatty tissue called myelin. Second, during childhood and adolescence, the brain is undergoing “pruning”—the paring away of unused synapses, leading to more efficient neural connections. Through myelination and pruning, the brain’s frontal lobes change to help the brain work faster and more efficiently, improving the “executive” functions of the frontal lobes, including impulse control and risk evaluation. This shift in the brain’s composition continues throughout adolescence and into young adulthood.

182. In late adolescence, important aspects of brain maturation remain incomplete, particularly those involving the brain’s executive functions and the coordinated activity of regions involved in emotion and cognition. As such, the part of the brain that is critical for control of impulses and emotions and for mature, considered decision-making is still developing during adolescence, consistent with the demonstrated

behavioral and psychosocial immaturity of juveniles.

183. Meta, YouTube, Snap, and TikTok's social media platforms are designed to exploit minor users' diminished decision-making capacity, impulse control, emotional maturity, and psychological resiliency caused by users' incomplete brain development. Defendants know, or in the exercise of reasonable care should know, that because their minor users' frontal lobes are not fully developed, they experience enhanced dopamine responses to stimuli on Defendants' social media platforms and are therefore much more likely to become addicted to Defendants' platforms; exercise poor judgment in their social media activity; and act impulsively in response to negative social media encounters. Defendants also know, or in the exercise of reasonable care should know, that minor users of their social media platforms are much more likely to sustain serious physical and psychological harm through their social media use than adult users. Nevertheless, Defendants knowingly designed their social media platforms to be addictive to minor users and failed to include in their platform design any safeguards to account for and ameliorate the psychosocial immaturity of their minor users.

C. The Mental Health Toll Caused By Defendants

184. A 2018 survey of U.S. teens determined that one in six teenagers have experienced at least one of six different forms of abusive behavior online: Name-calling (42%); Spreading false rumors (32%); Receiving unsolicited explicit images (25%); Having their activities and whereabouts tracked by someone other than a parent (21%); Someone making physical threats (16%); Having explicit images of them shared without their consent (7%). The survey found that 90% of teens believe online harassment is a

problem for people their age, and 63% identify it as a “major problem.”³⁵

185. Describing technology platforms such as those of Defendants, the U.S Surgeon General stated, “[w]hen not deployed responsibly and safely, these tools can pit us against each other, reinforce negative behaviors like bullying and exclusion, and undermine the safe and supportive environments young people need and deserve.”³⁶

186. And the increasing mental health issues from being online cannot be attributed merely to the actions of users on the platforms. Indeed, a 2022 cyber-bullying survey depicts lower incidence of cyberbullying than 2018.³⁷ Nevertheless, the mental health crisis for teens has continued to worsen.

187. In 2019, one in three high school students and half of female students reported persistent feelings of sadness or hopelessness, an overall increase of 40% from 2009. As stated the U.S. Surgeon General, “[T]oo often, young people are bombarded with messages through the media and popular culture that erode their sense of self-worth—telling them they are not good looking enough, popular enough, smart enough, or rich enough.”³⁸ The degree of hopelessness and isolation has led to increasing attempted suicides rates (a 36% increase from 2009 to 2019), and a staggering increase of those with suicide plans (44% increase from 2009 to 2019) as well as a tragic 57% increase in suicides

³⁵ Monica Anderson, *A Majority of Teens Have Experience Some Form of Cyberbullying*, Pew Research Center (Sept. 27, 2018), available at <https://www.pewresearch.org/internet/2018/09/27/a-majority-of-teens-have-experienced-some-form-of-cyberbullying/>.

³⁶ See U.S. Surgeon General’s Youth Mental Health Advisory at 3.

³⁷ Emily A .Vogels, *Teens and Cyberbullying 2022*, Pew Research Center (December 15, 2022), available at <https://www.pewresearch.org/internet/2022/12/15/teens-and-cyberbullying-2022/>.

³⁸ See U.S. Surgeon General’s Youth Mental Health Advisory at 3.

of 10-24 year-olds between 2007 and 2018.³⁹

188. Studies confirm that at these pivotal ages that much of the damage is wrought internally to users by social media users.⁴⁰ Social media and Defendants platforms are particularly susceptible to negative social comparison and feedback-seeking.⁴¹

D. The Impact of Defendants' Actions on Schools and Plaintiff

189. These severe mental health consequences have placed severe burdens on society and, in particular, schools. It cannot be stated strongly enough that social media has drastically changed the high school and middle school experience of students across the nation. As succinctly reported, “The youth mental health crisis is not getting better, and schools are increasingly being pressed into service as first responders amid rising rates of suicidal ideation, overdoses and gun violence.”⁴²

190. As the caretakers of students, 97% of public schools now provide mental health services in some form with over two-thirds of schools reporting an increase of students seeking services since 2020.⁴³ Only 12% of schools strongly agreed they could

³⁹ See U.S. Surgeon General’s Youth Mental Health Advisory at 8.

⁴⁰ Kira E. Riehms, Kenneth A. Feder, Kayla N. Tormohlen, *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, JAMA Psychiatry (Sept. 11, 2019), available at <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2749480.a>.

⁴¹ Jacqueline Nesi, Mitchell Prinsetin, *Using Social Media for Social Comparison and Feed-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms*, 43 J. Abnorm. Child Psychol. 8, at 1427-1438 (Nov 2015), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5985443/>.

⁴² Sabrina Moreno, *The Funding Cliff for Student Mental Health*, Axios (Feb. 2, 2023), available at <https://wwwaxios.com/2023/02/02/funding-cliff-student-mental-health>.

⁴³ *Results from the April 2022 School Pulse Panel*, U.S. Dep’t of Ed., Institute of Education Services, available at https://ies.ed.gov/schoolsurvey/spp/SPP_April_Infographic_Mental_Health_and_Well_Being.pdf. See also, <https://ies.ed.gov/schoolsurvey/spp/> (2022 School Pulse Panel”).

effectively provide mental health services to students in need, and just over half believed they could effectively provide these services. Among the factors listed by those that did not strongly agree, 61% stated they have “insufficient mental health professional staff coverage to manage caseload”; 57% stated they have “inadequate access to licensed mental health professionals”; and 48% stated they have “inadequate funding.”⁴⁴

191. Schools are struggling not only to provide students with mental health services but also to deliver an adequate education because of the youth mental health crisis. Students in grades 6–12 identify depression, stress, and anxiety as the most prevalent obstacles to learning.⁴⁵ Most middle school and high school students also fail to get enough sleep on school nights, which contributes to poor academic performance.⁴⁶ These negative mental health outcomes are also the most common symptoms of excessive social media use.

192. The youth mental health crisis has also caused a wide range of other behavioral issues among students that interfere with schools’ ability to teach. In 2022, 61% of public schools saw an increase in classroom disruptions from student misconduct compared to school years before the pandemic.⁴⁷ 58% of public schools also saw an increase in rowdiness outside of the classroom, 68% saw increases in tardiness, 27% saw increases in students skipping classes, 55% saw increases in the use of electronic devices

⁴⁴ *Id.*

⁴⁵ Insights From the Student Experience, Part I: Emotional and Mental Health at 2–3, YouthTruth (2022), https://youthtruthsurvey.org/wp-content/uploads/2022/10/YouthTruth_EMH_102622.pdf.

⁴⁶ Anne G. Wheaton *et al.*, *Short Sleep Duration Among Middle School and High School Students—United States, 2015*, 67(3) Morbidity & Mortality Wkly. Rpt. 85–90 (Jan. 26, 2018), <http://dx.doi.org/10.15585/mmwr.mm6703a1>.

⁴⁷ 2022 School Pulse Panel.

when not permitted, 37% saw an increase in bullying, 39% saw an increase in physical fights between students, and 46% saw an increase in threats of fights between students.⁴⁸

193. Further exacerbating school's struggle to teach is the fact students are not showing up to school. Indeed, student absenteeism has greatly increased. In the 2021–22 school year, 39% of public schools experienced an increase in chronic student absenteeism compared to the 2020–21 school year, and 72% of public schools saw increased chronic student absenteeism compared to school years before the pandemic.⁴⁹ Following suit, vandalism has increased in 2022, with 36% of public schools reporting increased acts of student vandalism on school property.⁵⁰

194. School districts have borne increased costs and expenses in response to the youth mental health crisis. These costs include:

- hiring additional mental health personnel (41% of public schools added staff to focus on student mental health);⁵¹
- developing additional mental health resources (46% of public schools created or expanded mental health programs for students, 27% added student classes on social, emotional, and mental health and 25% offered guest speakers for students on mental health);⁵²
- training teachers to help students with their mental health (56% of public schools offered professional development to teachers on helping students with mental health);⁵³
- increasing disciplinary services and hiring additional personnel for disciplinary services in response to increased bullying and harassment over social media;

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

- addressing property damaged as a result of students acting out because of mental, social, and emotional problems Defendants' conduct caused;
- diverting time and resources from instruction activities to notify parents and guardians of students' behavioral issues and attendance;
- investigating and responding to threats made against schools and students over social media;
- updating its student handbook to address use of Defendants' platforms; and
- updating school policies to address use of Defendants' platforms.

195. Plaintiff has likewise been directly harmed by the mental health crisis among youth in its community.

196. To address the decline in students' mental, emotional, and social health, Plaintiff has been forced to divert resources and expend additional resources.

197. But even with these resources, Plaintiff cannot keep up with the increased need for mental health services because of the youth mental health crisis.

198. Plaintiff requires significant and long-term funding to address the nuisance Defendants have created and amplified.

199. Defendants must abate their wrongs.

VIII. CLAIM FOR RELIEF

COUNT ONE — PUBLIC NUISANCE

200. Plaintiff repeats, reasserts, and incorporates the allegations contained above as if fully set forth herein.

201. A public nuisance is one which affects equally the rights of an entire community or neighborhood, although the extent of the damage may be unequal.

202. In addition, a public nuisance constitutes an unreasonable interference with a right common to the general public, such as a condition dangerous to health, offensive to

community moral standards, or unlawfully obstructing the public in the free use of public property.

203. The Plaintiff and its students have a right to be free from conduct that endangers their health and safety. Yet Defendants have engaged in conduct which endangers or injures the health and safety of the students of the Plaintiff by design and operational choices that have maximized profit over the well-being of its users as well as explicitly targeting tween- and teenage children for monetary purposes.

204. Each Defendant has created or assisted in the creation of a condition that is injurious to the health and safety of Plaintiff and its students, and interferes with the comfortable enjoyment of life and property of entire communities and/or neighborhoods.

205. Defendants' conduct has caused increased mental health issues and a severe disruption of the public peace, order and safety, including disruption of schools, classes and the learning environment. Defendants' conduct is ongoing and continues to produce permanent and long-lasting damage.

206. The health and safety of the students of the Plaintiff, including those who use, have used, or will use Defendants' Social Media platforms, as well as those affected by users of these Social Media platforms, are matters of substantial public interest and of legitimate concern to Plaintiff.

207. Defendants' conduct has impacted and continues to impact Plaintiff and is likely to continue causing significant harm to its students and schools.

208. But for Defendants' actions, there is no doubt that mental health issues would not be as widespread as it is today, and the massive epidemic teen depression, anxiety and self-harm that currently exists would have been averted.

209. Logic, common sense, justice, policy, and precedent indicate Defendants' unfair and deceptive conduct has caused the damage and harm complained of herein. Defendants knew or reasonably should have known that their behavior regarding the risks and benefits of the use of Defendants' Social Media platforms were causing harm. Thus, the public nuisance caused by Defendants to Plaintiff was reasonably foreseeable, including the financial and economic losses incurred by Plaintiff.

210. Defendants' actions were, at the very least, a substantial factor in the youth mental health epidemic, and in the public health crisis in schools.

211. Defendants' conduct in creating and maintaining the public nuisance were neither fully regulated nor required by any federal or New Jersey law.

212. The public nuisance alleged herein can be abated and further recurrence of such harm and inconvenience can be abated.

213. Plaintiff has been, and continues to be, directly and proximately injured by Defendants' actions in creating a public nuisance.

214. Plaintiff suffered special injuries distinguishable from those suffered by the general public.

215. Defendants' conduct was accompanied by wanton and willful disregard of persons who foreseeably might be harmed by their acts and omissions.

COUNT TWO - NEGLIGENCE

216. Plaintiff repeats, reasserts, and incorporates the allegations contained above as if fully set forth herein.

217. Each Defendant owed a duty of care to Plaintiff, including because each Defendant knew or foreseeably should have known that its conduct in designing, setting

up, promoting, managing, and operating its social media platform(s) would inflict severe mental harms on school children throughout the country, which Plaintiff School District would have to address.

218. Each Defendant has breached, and continues to breach, its duties of care owed to Plaintiff through its affirmative malfeasance, actions, business decisions, and policies in the development, setup, management, maintenance, operation, marketing, advertising, promotion, supervision, and control of its respective platforms.

219. As alleged above, each Defendant knew, or in the exercise of reasonable care, should have known of the hazards and dangers of Defendants' platforms, specifically the addictive, compulsive, and excessive use of, Defendants' platforms, which foreseeably can lead to a cascade of negative effects, including but not limited to dissociative behavior, withdrawal symptoms, social isolation, damage to body image and self-worth, increased risk behavior, exposure to predators, sexual exploitation, suicidal ideation, and profound mental health issues for students including but not limited to depression, body dysmorphia, anxiety, suicidal ideation, self-harm, insomnia, eating disorders, death, and other harmful effects.

220. Each Defendant knew, or in the exercise of the reasonable care, should have known that their conduct violated the duty of care to Plaintiff and its students, including providing accurate, true, and correct information concerning the risks of using Defendants' platforms and appropriate, complete, and accurate warnings concerning the potential adverse effects of using the social media platform.

221. Each Defendant knew, or in the exercise of the reasonable care, should have known that their conduct could be remedied and abated.

222. As a direct and proximate cause of each Defendant's unreasonable and negligent conduct, Plaintiff has suffered and will continue to suffer harm, and is entitled to damages in an amount determined at trial.

223. Defendants made conscious decisions not to warn or inform the public, including Plaintiff and Plaintiff's students, even as the evidence mounted of the severe harms Defendants' platforms were inflicting on the nation's school children.

IX. REQUEST FOR RELIEF

WHEREFORE, Plaintiff demands judgment as follows:

A. That acts alleged above be adjudged and decreed to have created, or were a substantial factor in creating, a public nuisance;

C. A judgment against Defendants for the damages sustained by Plaintiff, and for any additional damages, penalties, and other monetary relief provided by applicable law;

D. An order providing injunctive and other equitable relief as necessary to protect the interests of Plaintiff and its students;

E. By awarding Plaintiff prejudgment and post-judgment interest as provided by law, and that such interest be awarded at the highest legal rate from and after service of this Complaint;

F. The costs of this suit, including reasonable attorney fees; and

G. Such other and further relief as the Court deems just and proper.

X. JURY TRIAL DEMANDED

Plaintiff requests a jury trial, under Federal Rule of Civil Procedure 38, on all claims so triable.

DATED: February 16, 2023

Respectfully submitted,

**CARELLA, BYRNE, CECCHI,
BRODY & AGNELLO, P.C.**

/s/ James E. Cecchi

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